UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF TEXAS

UNITED STATES OF AMERICA,)
CHIED STATES OF AMERICA,)
Plaintiff,)
v.) Civil Action No. 4:10-cv-3569
BP PRODUCTS NORTH AMERICA INC.))
Defendant.)))

COMPLAINT

Plaintiff, the United States of America ("United States"), by the authority of the Attorney General of the United States and through the undersigned attorneys, acting at the request of the Administrator of the United States Environmental Protection Agency ("EPA"), files this Complaint and alleges as follows:

PRELIMINARY STATEMENT

- 1. This is a civil action brought pursuant to Section 113(b)(2) of the Clean Air Act ("CAA"), 42 U.S.C. § 7413(b)(2), against BP Products North America Inc. ("BP Products") for its violations of Sections 112(r)(1) and 112(r)(7)(E) of the CAA, 42 U.S.C. §§ 7412(r)(1) and 7412(r)(7)(E), and the Chemical Accident Prevention Provisions promulgated at 40 C.F.R. Part 68 (the "Risk Management Program" regulations) at its petroleum refinery located at 2401 5th Ave. South in Texas City, Texas (the "Texas City Refinery").
- 2. BP Products' violations of the CAA Section 112(r)(1) "General Duty Clause," 42 U.S.C. § 7412(r)(1), and the Risk Management Program regulations relate, in part, to three

events at the Texas City Refinery. First, on or about August 10, 2005, a combination of liquid and high-pressure gaseous hydrocarbons leaked from a pressure let-down valve (known as "LV-1500B") in the Cat Feed Hydrotreater Unit at the Texas City Refinery. Second, on or about July 28, 2005, a fire occurred at the Resid Hydrotreater Unit at the Texas City Refinery after a piping elbow on hydrogen-gas outlet piping at a heat exchanger ruptured. Third, on or about March 30, 2004, a fire occurred at the B-406 furnace in the desulfurizer section of the Ultraformer Unit No. 4 at the Texas City Refinery.

- 3. In addition to these three events, BP Products also failed to report information required under the Risk Management Program regulations regarding propylene (*a.k.a.* 1– propene), ethylene (*a.k.a.* ethene), and 1, 3–butadiene in the Risk Management Plan for covered processes at the Texas City Refinery.
- 4. Pursuant to Section 113(b)(2) of the CAA, 42 U.S.C. § 7413(b)(2), the United States seeks the assessment of civil penalties and appropriate injunctive relief based on BP Products' violations of Sections 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), and of the Risk Management Program Regulations.

JURISDICTION AND VENUE

- 5. This Court has jurisdiction over the subject matter of this action pursuant to 42 U.S.C. § 7413(b) and pursuant to 28 U.S.C. § 1331, 1345, and 1355.
- 6. Venue is proper in this district pursuant to 42 U.S.C. § 7413(b) and 28 U.S.C. §§ 1391(b) and (c) and 28 U.S.C. § 1395 because Defendant BP Products resides and is doing business within this judicial district at its Texas City Refinery, because the actions giving rise to the violations alleged in this Complaint occurred in this judicial district, and because Defendant BP Products may otherwise be found in this judicial district.

7. Notice of the commencement of this action has been given to the State of Texas pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b).

PARTIES

- 8. Plaintiff is the United States of America, acting at the request of the United States Environmental Protection Agency ("EPA"), an agency of the United States.
- 9. Defendant BP Products is a corporation organized under the laws of the State of Maryland and is doing business in this judicial district at its Texas City Refinery.

GENERAL ALLEGATIONS

- 10. At all relevant times, BP Products was, and currently is, the "owner and operator" of the Texas City Refinery as defined in CAA Section 112(a)(9), 42 U.S.C. § 7412(a)(9), and within the meaning of CAA Section 112(r) and the Risk Management Program regulations.
- 11. At all relevant times, the Texas City Refinery was, and currently is, a "stationary source" as defined in CAA Section 112(r)(2)(C), 42 U.S.C. § 7412(r)(2)(C).
- 12. At all relevant times, Defendant BP Products was, and currently is, a "person" as defined in Section 302(e) of the CAA, 42 U.S.C. § 7602(e), and within the meaning of Section 113(b) of the CAA, 42 U.S.C. § 7413(b).
- 13. At all relevant times, the Texas City Refinery produced, processed, handled, and/or stored toxic and flammable "regulated substances," as defined in CAA Section 112(r)(2)(B), 42 U.S.C. § 7412(r)(2)(B), and as also listed in 40 C.F.R. § 68.130, including, but not limited to, butane, ethane, ethylene, hydrogen, hydrogen sulfide, methane, pentane, propane, propylene, sulfur dioxide, and 1,3–butadiene. At all relevant times, the Texas City Refinery also produced, processed, handled, and/or stored "extremely hazardous substances," within the

meaning of CAA Section 112(r)(1), 42 U.S.C. § 7412(r)(1), including, but not limited to, benzene, carbon monoxide, and xylene.

- 14. At all relevant times, Alkylation ("Alky") Units 2 & 3, Fluidized Catalytic Cracking Units ("FCCUs") 1, 2, and 3, the Cat Feed Hydrotreater Unit, the Resid Hydrotreater Unit, Ultraformer No. 3 Unit, and Ultraformer No. 4 Unit at the Texas City Refinery had more than threshold quantities present of toxic and/or flammable regulated substances, as listed at 40 C.F.R. § 68.130, including, but not limited to, butane, ethane, ethylene, hydrogen, hydrogen sulfide, methane, pentane, propane, propylene, sulfur dioxide, and/or 1,3–butadiene.
- 15. At all relevant times, Alky Units 2 & 3, FCCUs 1, 2, and 3, the Cat Feed Hydrotreater Unit, the Resid Hydrotreater Unit, Ultraformer No. 3 Unit, and Ultraformer No. 4 Unit at the Texas City Refinery were "petroleum refining process units" and "covered processes" as defined at 40 C.F.R. § 68.3 and within the meaning of 40 C.F.R. § 68.10(d).
- 16. At all relevant times, the Texas City Refinery was subject to the CAA "General Duty Clause" at Section 112(r)(1), 42 U.S.C. 7412(r)(1), regarding the prevention of "accidental releases," as defined in CAA Section 112(r)(2)(A), 42 U.S.C. § 7412(r)(2)(A), and 40 C.F.R. § 68.3.
- 17. At all relevant times, pursuant to 40 C.F.R. § 68.10(d), the Texas City Refinery and the covered processes listed above were subject to the requirements of the "Program 3" Risk Management Program regulations.

A. The August 10, 2005 Cat Feed Hydrotreater Unit Leak

18. On or about August 10, 2005, the LV-1500B pressure let-down valve at the Texas City Refinery's Cat Feed Hydrotreater Unit leaked a combination of liquid and high-pressure

gaseous hydrocarbons. The leak was caused by flow-enhanced high-temperature sulfidation corrosion and erosion.

- 19. Upon information and belief, BP engineering specifications, as well as other relevant and generally recognized engineering standards, established limits for relevant process conditions at the LV-1500B pressure let-down valve and the Cat Feed Hydrotreater Unit, including, but not limited to, fluid velocity.
- 20. Upon information and belief, BP engineering specifications, as well as other relevant and generally recognized engineering standards, established the appropriate materials of construction and design specifications for valves, such as the LV-1500B pressure let-down valve.
- 21. Between 1983 and 2001, BP Products increased the feed rate to the Cat Feed Hydrotreater Unit several times. The increased feed rate to the Cat Feed Hydrotreater Unit, in turn, increased the fluid velocity through the LV-1500B pressure let-down valve. The type of metal and design of the LV-1500B pressure let-down valve were insufficient to withstand the increased fluid velocity and other process conditions.
- 22. As a result of the August 10, 2005 leak at the Cat Feed Hydrotreater Unit, the Texas City Refinery released listed regulated substances and extremely hazardous substances into the air, including, but not limited to, ammonia, butane, carbon monoxide, hydrogen sulfide, isobutane, isopentane, nitrogen oxides, pentane, propane, and sulfur dioxide.
- 23. The release of these listed regulated substances and extremely hazardous substances constituted an "accidental release" within the meaning of CAA Section 112(r)(2)(A), 42 U.S.C. § 7412(r)(2)(A), and the Risk Management Program regulations.

B. The July 28, 2005 Resid Hydrotreater Unit Fire

- 24. On July 28, 2005, an 8-inch diameter carbon-steel piping elbow located on hydrogen-gas outlet piping at a heat exchanger within the Resid Hydrotreater Unit at the Texas City Refinery ruptured and caused a fire.
- 25. The carbon-steel piping elbow was one of three piping elbows temporarily removed from the heat exchanger by a maintenance contractor during a scheduled overhaul in February 2005. The three piping elbows were located at different points within the heat exchanger that operated at varying temperatures and pressures. Though all three piping elbows otherwise appeared to be identical, one of them was made of alloy-steel a type of steel that was necessary to withstand the higher temperatures and pressures of its designated location within the heat exchanger.
- 26. After the overhaul was completed, however, the carbon-steel piping elbow was incorrectly re-installed in the heat exchanger at the point where the alloy-steel piping elbow should have been replaced. Unlike the alloy-steel piping elbow, the carbon-steel piping elbow was unable to withstand the higher temperatures and pressures to which it was exposed to at its new, incorrect location within the heat exchanger.
- 27. As a result of the July 28, 2005 fire at the Resid Hydrotreater Unit, the Texas City Refinery released listed regulated substances and extremely hazardous substances into the air, including, but not limited to, butane, butene, carbon monoxide, ethane, ethylene, hydrogen sulfide, isobutane, isobutene, isopentane, nitrogen oxides, pentane, propane, propylene, and sulfur dioxide.

28. The release of these listed regulated substances and extremely hazardous substances constituted an "accidental release" within the meaning of CAA Section 112(r)(2)(A), 42 U.S.C. § 7412(r)(2)(A), and the Risk Management Program regulations.

C. The March 30, 2004 Ultraformer No. 4 Fire

- 29. On March 30, 2004, a 20-inch diameter pipe running to the B-406 furnace at the Texas City Refinery's Ultraformer Unit No. 4 ruptured and caused a fire in the desulfurizer section of the process unit.
- 30. Prior to the March 30, 2004 explosion, BP Products never inspected or conducted examinations of the B-406 furnace outlet piping at the Ultraformer Unit No. 4.
- 31. The piping failure was caused by a combination of untreated and undetected corrosion and erosion that, over time, reduced the pipe-wall thickness to the point where it ruptured at the normal operating temperature and pressure of the Ultraformer Unit No. 4.
- 32. As a result of the fire, operators at the Ultraformer Unit No. 4 called for an evacuation of the unit. Control of the Ultraformer Unit No. 4 had to be re-established from a remote location.
- 33. As a result of the March 30, 2004 fire at the Ultraformer Unit No. 4, the Texas City Refinery released listed regulated substances and extremely hazardous substances into the air, including, but not limited to, benzene, butane, carbon monoxide, ethane, hydrogen, hydrogen sulfide, methane, nitrogen oxides, pentane, propane, sulfur dioxide, toluene, and xylene.
- 34. The release of these listed regulated substances and extremely hazardous substances constituted an "accidental release" within the meaning of CAA Section 112(r)(2)(A), 42 U.S.C. § 7412(r)(2)(A), and the Risk Management Program regulations.

STATUTORY AND REGULATORY FRAMEWORK

- A. CAA Section 112(r)(1) the "General Duty Clause"
- 35. CAA Section 112(r)(1), 42 U.S.C. § 7412(r)(1), provides in pertinent part:

[t]he owners and operators of stationary sources producing, processing, handling or storing [any substance listed pursuant to Section 112(r)(3) of the CAA or any other extremely hazardous substance] have a general duty...to identify hazards which may result from such releases using appropriate hazard assessment techniques, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases which do occur.

- B. CAA Section 112(r)(7)
- 36. CAA Section 112(r)(7), 42 U.S.C. § 7412(r)(7), provides in pertinent

part:

(A) In order to prevent accidental releases of regulated substances, the Administrator is authorized to promulgate release prevention, detection, and correction requirements which may include monitoring, record-keeping, reporting, training, vapor recovery, secondary containment, and other design, equipment, work practice, and operational requirements.

. . .

(B) (ii) The regulations under this subparagraph shall require the owner or operator of stationary sources at which a regulated substance is present in more than a threshold quantity to prepare and implement a risk management plan to detect and prevent or minimize accidental releases of such substances from the stationary source, and to provide a prompt emergency response to any such releases in order to protect human health and the environment. Such plan shall provide for compliance with the requirements of this subsection.

. . .

(B) (iii) The owner or operator of each stationary source covered by clause (ii) shall register a risk management plan prepared under this subparagraph with the

Administrator before the effective date of regulations under clause (i) in such form and manner as the Administrator shall, by rule, require.

C. The Risk Management Program Regulations

- 37. In accordance with CAA Section 112(r)(7), 42 U.S.C. § 7412(r)(7), in 1994, the Administrator of EPA promulgated the Risk Management Program regulations.
- 38. Pursuant to CAA Section 112(r)(7)(E), it is unlawful for any person to operate any stationary source subject to the Risk Management Program requirements and regulations in violation of such requirements and regulations.
- 39. Pursuant to 40 C.F.R. § 68.10, the owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process must comply with the Risk Management Program regulations.
- 40. Pursuant to 40 C.F.R. § 68.12, the owner or operator of a stationary source with a process subject to the "Program 3" requirements of the Risk Management Program regulations must, among other things, comply with the prevention requirements of 40 C.F.R. §§ 68.65 68.87.

D. Enforcement of the CAA

41. CAA Section 113(b), 42 U.S.C. § 7413(b), as amended by 28 U.S.C. § 2461 and 31 U.S.C. § 3701, provides that, whenever a person violates any requirement or prohibition of Subchapter I of the CAA (42 U.S.C. §§ 7401-7515), the Administrator of EPA shall, as appropriate, in the case of a person which is the owner or operator of a major stationary source, and may, in the case of any other person, commence a civil action for injunctive relief and to assess and recover a civil penalty of up to \$27,500 per day for each violation that occurred on or

after January 31, 1997 through March 15, 2004, and up to \$32,500 per day for each violation that occurred after March 15, 2004.

SPECIFIC ALLEGATIONS: THE AUGUST 10, 2005 CAT FEED HYDROTREATER LEAK

FIRST CLAIM FOR RELIEF

(CAA Section 112(r)(1) – Failure to Design and Maintain a Safe Facility)

- 42. Paragraphs 1 through 41 are incorporated herein by reference.
- 43. At all times relevant herein and prior to the August 10, 2005 leak, upon information and belief, BP Products failed to design and maintain the Cat Feed Hydrotreater Unit at the Texas City Refinery so as to be safe and free of recognized hazards. Upon information and belief, these hazards included, but were not limited to, the risk that exceeding BP engineering specifications and/or other generally recognized engineering standards for fluid velocity, design, and compatible materials of construction of the LV-1500B pressure let-down valve would or was likely to result in an accidental release of regulated substances at the Cat Feed Hydrotreater Unit.
- 44. Upon information and belief, these hazards were recognized by BP Products and/or generally within the petroleum refining industry.
- 45. Feasible means existed by which BP Products could have eliminated or reduced these hazards.
- 46. As a result of these acts or omissions, BP Products failed to design and maintain the LV-1500B pressure let-down valve and the Cat Feed Hydrotreater Unit to prevent releases of regulated substances, and therefore, failed to design and maintain a safe facility taking such steps as are necessary to prevent such releases.

- 47. As a result of its failure to design and maintain a safe facility, BP Products violated the General Duty Clause of CAA Section 112(r)(1), 42 U.S.C. § 7412(r)(1). These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 48. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

SECOND CLAIM FOR RELIEF (Program 3 Prevention Program – Mechanical Integrity) (40 C.F.R. § 68.73(b))

- 49. Paragraphs 1 through 41 are incorporated herein by reference.
- 50. At all times relevant herein and prior to the August 10, 2005 leak, BP Products' engineering specification A-PLT-31.3E failed to require adequate consideration of process conditions in defining the proper metal to be used for valves that are used as a specification break, such as the LV-1500B pressure let-down valve within the Cat Feed Hydrotreater Unit.
- 51. In addition, at all times relevant herein and prior to the August 10, 2005 leak, the Inspection and Engineering Shop ("I&E Shop") at the Texas City Refinery failed to have a procedure for inspecting the bodies of valves, such as the LV-1500B pressure let-down valve.
- 52. As a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.73(b) by failing to establish and implement adequate written procedures to maintain the ongoing integrity of process equipment. These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 53. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for

each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

THIRD CLAIM FOR RELIEF (Program 3 Prevention Program – Mechanical Integrity) (40 C.F.R. § 68.73(c))

- 54. Paragraphs 1 through 41 are incorporated herein by reference.
- 55. At all times relevant herein and prior to the August 10, 2005 leak, BP Products' employees at the Texas City Refinery's I&E Shop were neither informed nor trained regarding the need to inspect/maintain the body of the LV-1500B pressure let-down valve.
- 56. As a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.73(c) by failing to adequately train each employee involved in maintaining the ongoing integrity of process equipment at the Cat Feed Hydrotreater Unit in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to ensure that the employee can perform the job tasks in a safe manner. These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 57. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

FOURTH CLAIM FOR RELIEF (Program 3 Prevention Program – Mechanical Integrity) (40 C.F.R. § 68.73(d)(2))

58. Paragraphs 1 through 41 are incorporated herein by reference.

- 59. At all times relevant herein and prior to the August 10, 2005 leak, BP Products' I&E Shop at the Texas City Refinery failed to adequately inspect the bodies of valves, such as the LV-1500B pressure let-down valve.
- 60. In addition, BP Products failed to establish Thickness Measurement Locations ("TMLs") on valve bodies, including the body of the LV-1500B pressure let-down valve, for routine inspections.
- 61. As a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.73(d)(2) by failing to establish and implement inspection and testing procedures that follow recognized and generally accepted good engineering practices. These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 62. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

FIFTH CLAIM FOR RELIEF (Program 3 Prevention Program – Mechanical Integrity) (40 C.F.R. § 68.73(e))

- 63. Paragraphs 1 through 41 are incorporated herein by reference.
- 64. At all times relevant herein and prior to the August 10, 2005 leak, BP Products failed to correct deficiencies in the LV-1500B pressure let-down valve at the Cat Feed Hydrotreater Unit before further use or in a safe and timely manner despite the valve being outside acceptable limits for corrosion and erosion.
- 65. As a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.73(e). These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).

66. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

SIXTH CLAIM FOR RELIEF (Program 3 Prevention Program – Mechanical Integrity) (40 C.F.R. § 68.73(f)(3))

- 67. Paragraphs 1 through 41 are incorporated herein by reference.
- 68. At all times relevant herein and prior to the August 10, 2005 leak, BP Products failed to assure that the materials of construction and design of the LV-1500B pressure let-down valve were suitable for the process applications for which the valve was used, and suitable for the process conditions existing in the Cat Feed Hydrotreater Unit.
- 69. As a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.73(f)(3). These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 70. Alternatively, and/or in addition to the allegations stated above, upon information and belief, BP Products violated 40 C.F.R. § 68.65(c)(1)(iv) by failing to compile adequate written process safety information regarding the technology of the Cat Feed Hydrotreater Unit process, including the safe upper and lower limits for such items as temperatures, pressures, flows, and/or compositions. These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 71. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

SEVENTH CLAIM FOR RELIEF (Program 3 Prevention Program – Management of Change) (40 C.F.R. § 68.75(b))

- 72. Paragraphs 1 through 41 are incorporated herein by reference.
- 73. At all times relevant herein and prior to the August 10, 2005 leak, BP Products failed to establish and implement written procedures that assured that the technical basis of increasing the feed rate to the Cat Feed Hydrotreater Unit and the fluid velocity in the LV-1500B pressure let-down valve, as well as the impact of those changes on safety and health, were adequately considered and addressed prior to making the changes.
- 74. As a result of these acts or omissions, BP Products violated 40 C.F.R. §§ 68.75(b)(1) and (b)(2). These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 75. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

EIGHTH CLAIM FOR RELIEF (Program 3 Prevention Program – Management of Change) (40 .F.R. § 68.75(c))

- 76. Paragraphs 1 through 41 and 55 are incorporated herein by reference.
- 77. As a result of its acts or omissions, BP Products violated 40 C.F.R. § 68.75(c). Each employee involved in operating the Cat Feed Hydrotreater Unit and/or its maintenance whose job tasks were affected by BP Products' increases to the Cat Feed Hydrotreater Unit feed rate were not adequately informed of or trained in the changes prior to start-up of the process or

the affected part of the process. These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).

78. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

SPECIFIC ALLEGATIONS: THE JULY 28, 2005 RESID HYDROTREATER FIRE

NINTH CLAIM FOR RELIEF (Program 3 Prevention Program – Mechanical Integrity) (40 C.F.R. § 68.73(b))

- 79. Paragraphs 1 through 41 are incorporated herein by reference.
- 80. At all times relevant herein and prior to the July 28, 2005 fire, BP Products failed to establish and implement adequate written procedures for performing Positive Materials

 Verification (PMI) during routine equipment maintenance, such as the February 2005 turnaround at the heat exchanger in the Resid Hydrotreater Unit.
- 81. As a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.73(b). These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 82. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

TENTH CLAIM FOR RELIEF (Program 3 Prevention Program – Mechanical Integrity) (40 C.F.R. § 68.73(c))

- 83. Paragraphs 1 through 41 are incorporated herein by reference.
- 84. At all times relevant herein and prior to the July 28, 2005 fire, upon information and belief, employees of BP Products at the Texas City Refinery that were involved in maintaining the ongoing integrity of the Resid Hydrotreater Unit and the heat exchanger involved in the July 28, 2005 fire were unaware that the piping elbows removed during the overhaul were made of different types of metal.
- 85. Upon information and belief, as a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.73(c). These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 86. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

ELEVENTH CLAIM FOR RELIEF (Program 3 Prevention Program – Mechanical Integrity) (40 C.F.R. § 68.73(f)(2))

- 87. Paragraphs 1 through 41 are incorporated herein by reference.
- 88. At all times relevant herein and prior to the July 28, 2005 fire, BP Products failed to perform appropriate checks and inspections to assure that the piping elbows at the heat exchanger in the Resid Hydrotreater Unit were re-installed properly and consistent with design specifications and the manufacturer's instructions.

- 89. As a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.73(f)(2). These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 90. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

TWELFTH CLAIM FOR RELIEF (Program 3 Prevention Program – Contractors) (40 C.F.R. § 68.87(b)(2))

- 91. Paragraphs 1 through 41 are incorporated herein by reference.
- 92. At all times relevant herein and prior to the July 28, 2005 fire, BP Products failed to adequately inform its maintenance contractor of the known potential hazards for fire, explosion, and/or toxic release if the piping elbows were incorrectly re-installed at the heat exchanger in the Resid Hydrotreating Unit. BP Products' maintenance contractor was unaware that the piping elbows were made of different types of metal.
- 93. As a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.87(b)(2). These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 94. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

SPECIFIC ALLEGATIONS: THE MARCH 30, 2004 ULTRAFORMER UNIT NO. 4 FIRE

THIRTEENTH CLAIM FOR RELIEF (Program 3 Prevention Program – Operating Procedures) (40 C.F.R. § 68.69(a))

- 95. Paragraphs 1 through 41 are incorporated herein by reference.
- 96. At all times relevant herein and prior to the March 30, 2004 fire, BP Products failed to have emergency shutdown procedures for the Ultraformer Unit No. 4's process safety system (known as the "Blue Button" system) that provided clear instruction to process unit operators. The operator training guide describing the Blue Button functions did not agree with the actual Blue Button functions and operators misunderstood the functions of the Blue Button.
- 97. As a result of these acts or omissions, BP Products violated 40 C.F.R. §§ 68.69(a)(1)(iv) and (a)(4) by failing to adequately develop and implement clear written operating procedures regarding emergency shutdown of the Ultraformer Unit No. 4 and regarding the process unit's safety systems and functions. These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 98. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

FOURTEENTH CLAIM FOR RELIEF (Program 3 Prevention Program – Initial Training) (40 C.F.R. § 68.71(a))

99. Paragraphs 1 through 41 are incorporated herein by reference.

- 100. At all times relevant herein and prior to the March 30, 2004 fire, BP Products failed to adequately train operators involved in operating the Ultraformer Unit No. 4 on emergency operations at the process unit, operating procedures regarding emergency shutdown of the Ultraformer Unit No. 4, and/or the Blue Button safety system and its functions.
- 101. As a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.71(a). These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 102. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

FIFTEENTH CLAIM FOR RELIEF (Program 3 Prevention Program – Refresher Training) (40 C.F.R. § 68.71(b))

- 103. Paragraphs 1 through 41 are incorporated herein by reference.
- 104. Alternatively, and/or in addition to the allegations of the Thirteenth Claim for Relief, upon information and belief, at all times relevant herein and prior to the March 30, 2004 fire, BP Products failed to provide adequate refresher training for operators involved in operating the Ultraformer Unit No. 4 on emergency operations at the process unit, operating procedures regarding emergency shutdown of the Ultraformer Unit No. 4, and/or the Blue Button safety system and its functions.
- 105. Upon information and belief, as a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.71(b). These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).

106. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

SIXTEENTH CLAIM FOR RELIEF (Program 3 Prevention Program – Mechanical Integrity) (40 C.F.R. § 68.73(b))

- 107. Paragraphs 1 through 41 are incorporated herein by reference.
- 108. At all times relevant herein and prior to the March 30, 2004 fire, BP Products failed to have a sufficient review and decision-making process for evaluating the fitness-for-service of piping, such as the outlet piping on the B-406 furnace at the Ultraformer Unit No. 4. No consistent process existed for evaluating the fitness-for-service of piping that was near discard thickness.
- 109. In addition, at all relevant times herein and prior to the March 30, 2004 fire, BP Products had an insufficient process for monitoring and evaluating inspection information to detect corrosion of piping, such as the outlet piping on the B-406 furnace at the Ultraformer Unit No. 4.
- 110. As a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.73(b). These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 111. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

SEVENTEENTH CLAIM FOR RELIEF (Program 3 Prevention Program – Mechanical Integrity) (40 C.F.R. § 68.73(d))

- 112. Paragraphs 1 through 41 and 108 through 109 are incorporated herein by reference.
- 113. At all times relevant herein and prior to the March 30, 2004 fire, BP Products failed to establish defined Thickness Measurement Locations for the B-406 furnace 20-inch outlet piping headers.
- 114. In addition, on January 11, 2004, BP Products' employees incorrectly changed the discard thickness values for two Thickness Measurement Location points on the B-406 furnace outlet piping (in contrast to the outlet piping headers). These erroneous changes led BP Products to believe that all thickness measurements on the B-406 furnace outlet piping were greater than discard value.
- 115. In addition, thickness measurements taken on the B-406 furnace outlet piping after the March 30, 2004 fire at the Ultraformer Unit No. 4 indicated that corrosion rates on the B-406 outlet piping were significantly greater than the historical corrosion rate.
- 116. As a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.73(d)(2). Alternatively, and/or in addition to the violation of 40 C.F.R. § 68.73(d)(2), as a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.73(d)(3). These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 117. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

EIGHTEENTH CLAIM FOR RELIEF (Program 3 Prevention Program – Mechanical Integrity) (40 C.F.R. § 68.73(e))

- 118. Paragraphs 1 through 41 and 108 through 109 are incorporated herein by reference.
- 119. At all times relevant herein and prior to the March 30, 2004 fire, the B-406 furnace outlet piping and header at the Ultraformer Unit No. 4 process unit were outside acceptable limits for corrosion and erosion and BP Products failed to correct such deficiencies before further use or in a safe and timely manner.
- 120. As a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.73(e). These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 121. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

NINETEENTH CLAIM FOR RELIEF (Program 3 Prevention Program – Management of Change) (40 C.F.R. § 68.75(b))

- 122. Paragraphs 1 through 41 and 114 are incorporated herein by reference.
- 123. At all times relevant herein and prior to the March 30, 2004 fire, BP Products failed to establish and implement written procedures that assured that both the technical basis of the change to the discard thickness values on the B-406 outlet piping and the impact of that change on safety and health were considered ands addressed prior to the change.

- 124. As a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.75(b). These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 125. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

SPECIFIC ALLEGATIONS: BP PRODUCTS' RISK MANGEMENT PLAN VIOLATIONS

TWENTIETH CLAIM FOR RELIEF (Risk Management Plan Submissions - 40 C.F.R. § 68.150)

- 126. Paragraphs 1 through 41 are incorporated herein by reference.
- 127. Since November 1, 2002 and at all times relevant herein, for covered processes at the Texas City Refinery, BP Products failed to include information regarding propylene, ethylene, and 1,3–butadiene in the Risk Management Plan (as required by 40 C.F.R. § 68.175(c)), the Risk Management Plan's Executive Summary (as required by 40 C.F.R. § 68.155(b)), and the Risk Management Plan's Registration Form (as required by 40 C.F.R. § 69.160(c)).
- 128. As a result of these acts or omissions, BP Products violated 40 C.F.R. § 68.150(a). These acts or omissions also constitute a violation of CAA Section 112(r)(7)(E).
- 129. Pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), as amended, BP Products is liable for injunctive relief and the assessment of a civil penalty of up to \$27,500 per day for each such violation occurring between January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each such violation occurring after March 15, 2004.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff, the United States of America, respectfully prays that this Court:

a) Enter judgment in favor of the United States and against the Defendant BP

Products;

b) Enjoin BP Products from any and all ongoing and future violations at the Texas

City Refinery of the applicable provisions of Clean Air Act Section 112(r), 42 U.S.C. § 7412(r),

and the Risk Management Program regulations;

Order BP Products to take appropriate measures to mitigate the effects of their

violations;

c)

d) Assess civil penalties against BP Products in an amount of up to \$27,500 per day

for each violation of the CAA and Risk Management Program regulations occurring between

January 30, 1997 and March 15, 2004, and up to \$32,500 per day for each violation occurring

between March 16, 2004 and January 11, 2009;

e) Award the United States its costs and expenses incurred in this action; and

f) Grant the United States any further and other relief that this Court may deem

appropriate.

Respectfully submitted,

IGNACIA S. MORENO

Assistant Attorney General

Environment & Natural Resources Division

United States Department of Justice

Attorney-in-charge:

By: s/Steven D. Shermer

Steven D. Shermer

Environmental Enforcement Section

Environmental and Natural Resources Division

25

U. S. Department of Justice P. O. Box 7611 - Ben Franklin Station Washington, DC 20044 (202) 514-1134 (Phone) (202) 616-6584 (Fax) Steven.Shermer@usdoj.gov D.C. Bar No. 486394

JOSÉ ANGEL MORENO United States Attorney Southern District of Texas

<u>Local Co-counsel</u>: KEITH EDWARD WYATT

Assistant United States Attorney

Texas Bar No. 22092900 Federal Bar No. 3480 Southern District of Texas

P.O. Box 61129

Houston, Texas 77208 Voice: 713-567-9713 Fax: 713-718-3303 Keith.Wyatt@usdoj.gov

ATTORNEYS FOR THE UNITED STATES

OF COUNSEL:

Evan L. Pearson Senior Enforcement Counsel U.S. Environmental Protection Agency -- Region 6 1445 Ross Avenue Dallas, Texas 75202-2733 (214) 665-8074